Dual Digital Drive

CD-RW 5232IA

User's Manual

CLASS 1 LASER PRODUCT
APPAREIL A LASER DE CLASSE 1
LASER KLASSE 1
LUOKAN 1 LASERLAITE
PRODUIT LASER
CATEGORIE 1

DANGER	INVISIBLE LASER RADIATION WHEN OPEN AVOID DIRECT EXPOSURE TO BEAM
VORSICHT	INSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETSEN
ATTENTION	RADIATION DU FAISCEAU LASER INVISIBLE EN CAS D'OUVERTURE. EVITER TOUTE EXPOSITION AUX RAYONS.

Copyright Statement

It is a criminal offence, under applicable copyright laws, to make unauthorised copies of copyright-protected material, including computer programs, films, broadcasts and sound recordings. This equipment should not be used for such purposes.

FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

FCC Warning Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can emit radio frequency energy and, if not installed or used in accordance with the instructions, may cause interference to radio communications. However, television reception interference can be determined by turning the equipment off and on. The user is encouraged to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment into an outlet different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FOR EUROPE

CE "The drive is in conformity with the EMC directive and low-voltage directive."

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INTRODUCTION

Thank you for the purchase of CD-RW 5232IA, a perfect and compact dual storage drive with the combination of an IDE CD-ReWritable drive and a USB-connected card reader. CD-RW 5232IA backs up all writing modes and different CD formats. It supports maximum 52x speed writing ability on CD-R discs, 32x speed on CD-RW discs and 52x speed reading performance. Other than that, the built-in 7 in 1 card reader which offers read-write capabilities of 7 memory card types simplifies the process of exchanging data between Digital cameras, voice recorders, PDAs, MP3s… and your computer. With this multi-functional solution and the bundled software package, you can view, archive, or write files/photos/video/music directly from the drive and enjoy the fascinating digital entertainment on your desktop.

Here are some important features of CD-RW 5232IA:

- Easy installation with CD-RW drive of IDE and card reader of USB 1.1 interface (on-board connection)
- 8X, 16X, 24X, 32X, 40X, 48X and 52X writing speed on CD-R media
- 4X, 10X, 12X, 16X, 20X, 24X and 32X writing speed on CD-RW media
- Adopts “MTKSuperLink” to prevent Buffer Underrun
- Supports MultiRead function
- Supports writing modes of TAO, DAO, SAO and packet writing
- Four-slot integration works with CompactFlash, MicroDrive, Memory Stick, Memory Stick Pro, MultiMediaCard, Secure Digital, and SmartMedia

System Requirements

For IBM compatible PCs, the system requirements recommended are as follows:

- Pentium II 350MHz above with at least 64MB of memory
- Fast and sufficient hard disk space (minimum 200MB for installation, 1GB or more is recommended.)
- IDE host interface supporting ATAPI MMC command & USB host interface (if you don't have USB on-board connection)
- Operating system: Microsoft Windows 98SE/ME/2000/XP

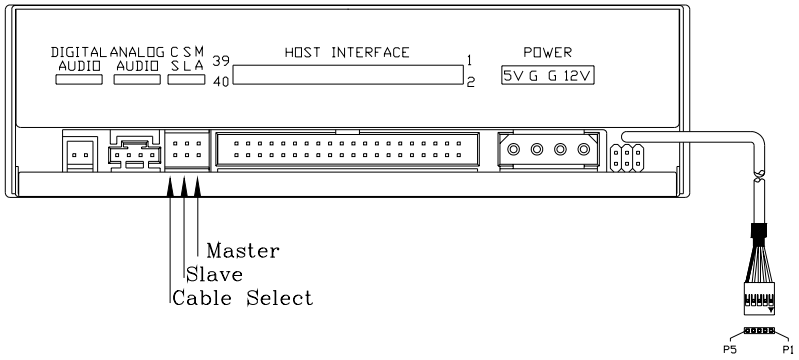
Package Contents

- Dual Digital Drive, CD-RW 5232IA
- Audio cable
- Application software disc
- 4pcs of screws/bag
- Quick Installation Guide

INSTALLATION

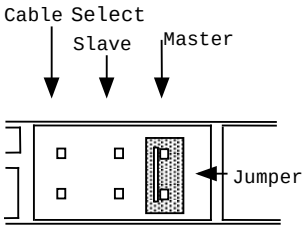
Host Interface Connections

Most current mainboards have two IDE ports (primary and secondary) which can connect two IDE cables. Two IDE cables allow you to connect up to four devices, but it is recommended that you separate IDE ports for your hard drive and your CD-ReWritable drive. This will ensure that your hard drive's performance and speed won't be affected by having the CD-RW drive on the same cable.



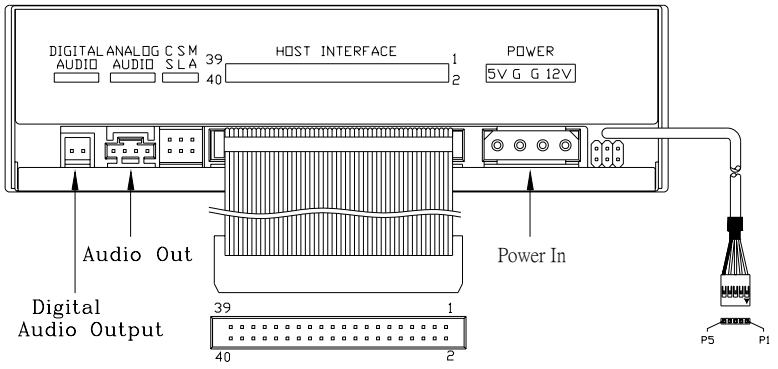
If you connect only one device on the cable, you can set the jumper as "MASTER" or "SLAVE".

If you connect two devices (e.g. CD-ROM & CD-RW) on the same cable, set different jumpers for each device (CD-ROM as "MASTER", CD-RW as "SLAVE" and vice versa.) The same rule applies to the connection of having your hard disk and another device on the same cable.



Hardware Installation

1. Turn off the power to the computer system.
2. Disconnect the power cord and all cables from the back of your computer, and then remove the cover of the computer.
3. Insert the drive into one of the vacant 5.25" drive bays and secure it with screws to your PC.
4. Connect one end of the 40-pin IDE cable to the IDE connector of this drive and the other end to the IDE port on your mainboard. Also, connect the power supply cable to the back of the drive.



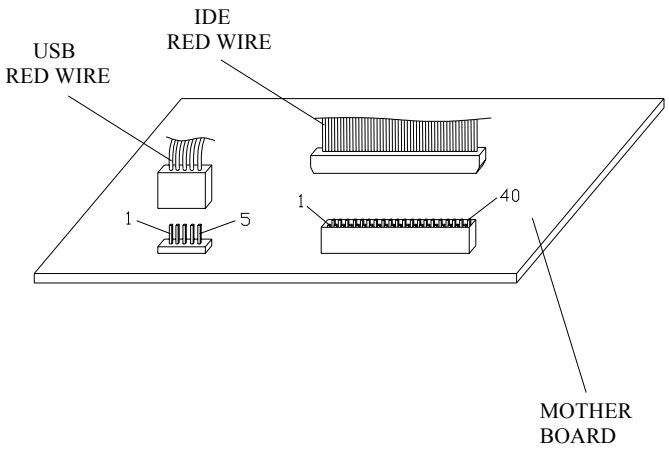
☞ *Make sure to align and connect the red-edge of the IDE Cable to Pin 1 on the drive.*

5. If you have a sound card that can be connected to this drive, you can connect the drive (as Audio-out) and the sound card (as Audio-in) with a 4-pin audio cable.

   If your mainboad is integrated with built-in sound system, plug the 4-pin audio cable into the CD-IN connector on the mainboard as Audio-in.

6. Connect the USB cable at the back of the drive to the USB connector on the mainboard. The red wire of the cable needs to plug into Pin 1 on the board.

   ☞ *This drive supports USB 1.1 and if you connect to USB 2.0 connector, only transfer rate of USB 1.1 will be available.*



7. Re-attach the cover of your computer, and reconnect the power cord and all cables.

Driver Installation

For the CD-RW Drive

For the CD-RW drive itself of CD-RW 5232IA, it is an IDE device supporting Plug & Play, and Windows 98SE/ME/2000/XP can **automatically detect** the drive and load the appropriate driver.

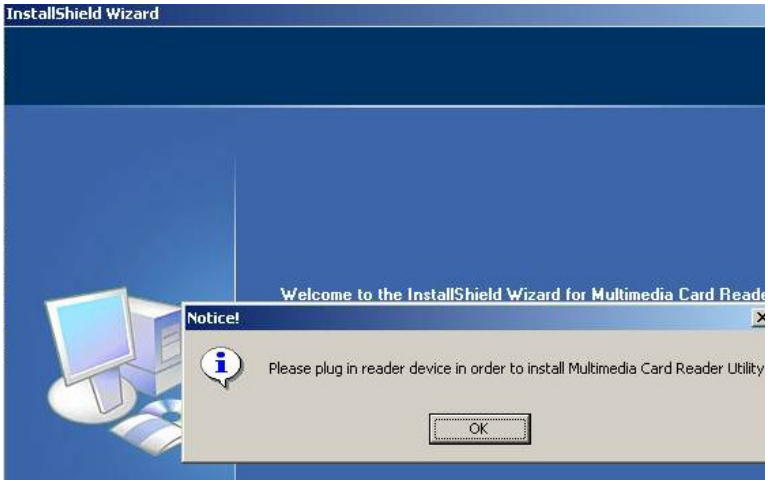
For the Card Reader

Windows 98SE/2000

If you run Window 98SE or 2000, please install the provided driver:

1. Insert the application disc.
2. Select:**Card Reader Driver**
3. Click "**setup.exe**", and follow the on-screen instructions:

InstallShield Wizard
Welcome to the InstallShield Wizard for Multimedia Card Reade
WARNING
This Package is a evaluation version.Not for release
Version 1.184.
Please plug in reader and wait for installation of Microsoft usb driver.
After installation is completed, please click Next.


InstallShield Wizard
Welcome to the InstallShield Wizard for Multimedia Card Reade
Notice!
Please plug in reader device in order to install Multimedia Card Reader Utility
OK

☞ *Click "OK" if you have already had USB cable connected (Refer to Hardware Installation, Step 6.)*

InstallShield Wizard Complete
The InstallShield Wizard has successfully installed Multimedia Card Reader. Before y
the program, you must restart your computer.
Found New Hardware
MediaBay 7 in 4
Remove any disks from their drives, and then click Finish to complete setup.

InstallShield Wizard Complete
The InstallShield Wizard has successfully installed Multimedia Card Reader. Before you
the program, you must restart your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
System Settings Change
Windows 2000 has finished installing new devices. You must restart your computer
before the new settings will take effect.
Do you want to restart your computer now?
Yes
No

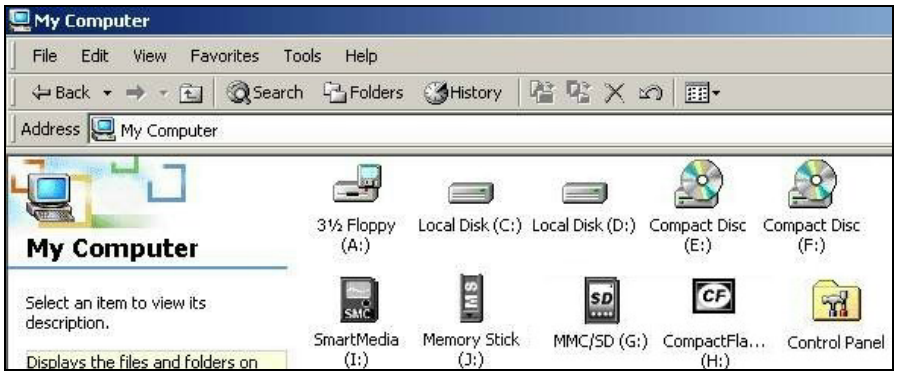
☞ *Make sure to restart your computer.*

Windows ME/XP

Since Windows ME and XP already have USB Mass Storage support, the card reader can be detected and work fine without installing driver. However, we recommend that you install the provided driver to have more explicit operation status of the card reader, as described below.

☞ *For Windows **XP** users, please upgrade to **Service Pack 1**.*

After the driver installation, 4 extra icons with different card type indicated will show in Device Manager/My computer. And then you can use each slot of the card reader for file archiving/recording.



While the card reader is reading data of memory cards, the icon for the card accessed will light up and the LED beside the card slot on the front panel will flash Green.

Software Installation

The bundled mastering software gives you the complete solution for making audio/data CDs. With the user-friendly interface, it guides you through the creation and backup of files/photos/video/music from your computer to a recordable compact disc. Combining of the card reader capabilities, no matter you are a novice or an experienced user; you can enrich your digital life with this best recording tool.

Windows Environment

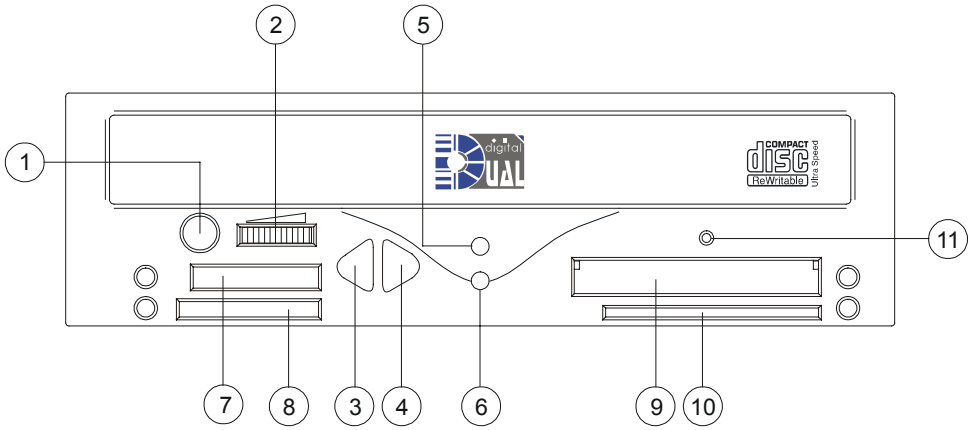
1. Insert the application CD and the installation program will run automatically. Then follow the on-screen procedures.

Or

2. Run**:\setup.exe** on the application CD.

CONNECTION & OPERATION

Front Panel



1. Headphone Jack

By plugging in the headphone jack here, you can listen to an audio CD (CD-DA disc) directly playing from the drive.

2. Headphone Volume Control

This knob adjusts the audio output level. Turn the wheel to the right/left for the volume control of your headphone.

3. Play/Skip button

Press this button to play tracks or skip to next track during the playing state.

4. Open/Stop/Close/Eject button

This button opens and closes the disc tray. If the tray is closed, pressing the button will eject it. If the drive is playing audio, pressing this button will stop it.

5. LED Indicator (CD-RW Drive)

Flashes "**green**" while verifying or reading a disc.

Flashes "**red**" while writing a CD-R/CD-RW disc.

6. LED Indicator (card reader)

Once the USB cable is correctly connected, this LED will light **yellow**, which means the card slots are ready to use.

7. Slot for Memory Stick (MS)/Memory Stick Pro (MS Pro)

8. Slot for Secure Digital (SD)/MultiMediaCard (MMC)

9. Slot for Compact Flash(CF) Type I, II/MicroDrive

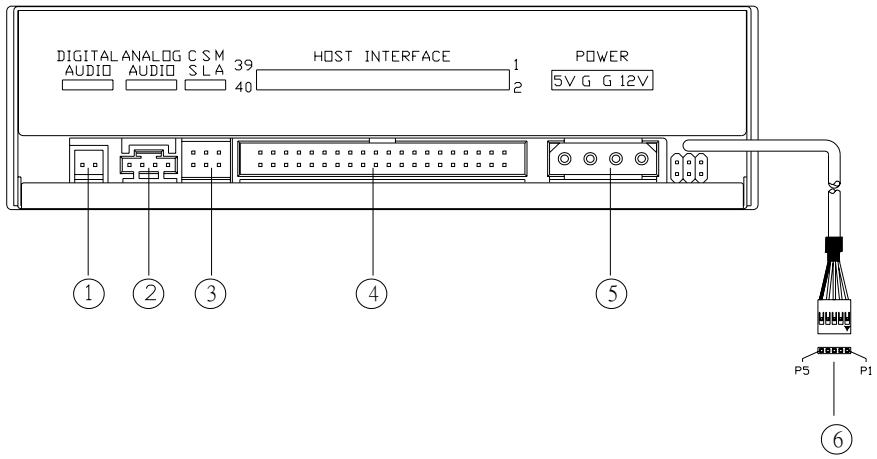
10. Slot for Smart Media

11. Emergency Eject Hole

When the Close/Eject button doesn't work properly and the disc tray can't be opened, you can insert a paper clip or a small rod into this hole for manual ejection. Please make sure to power off the system before you do that.

NOTE: The front panel is subject to change without notice.

Rear View



1. Digital Audio Output Connector

If your sound card has a digital audio IEC958 format connector, you can connect it to this digital audio output connector with a 2-pin audio cable.

2. Analog Audio Output Connector

This connector allows you to connect the drive to your sound card with a 4-pin audio cable.

3. Device Configuration Jumper

Set the jumper to Master, Slave or Cable Select according to your system configuration.

4. IDE Interface Connector

Plug one end of the 40-pin IDE cable here to join the 40-pin IDE connector on the motherboard. The red-edge of the IDE cable must be connected to Pin 1 of each connector.

5. Power Supply Connector

By plugging the computer's power supply cable here, you can connect the drive and your computer system.

6. USB Cable

Connect the USB cable to the USB connector on the mainboard. The red wire of the cable needs to plug into Pin 1 on the board.

TECHNICAL DATA

Interface	CD-RW Drive: IDE Card Reader: USB 1.1
Form factor	5.25" Half Height
Writing speed	**CD-R:** 8X/16X/24X/32X/40X/48X/52X **CD-RW:** 4X/10X/12X/16X/20X/24X/32X
Writing modes	TAO (Track at once), DAO (Disc At Once), SAO (Session at once), Multi-session, Incremental Packet Writing
Digital Media	CompactFlash, MicroDrive, Memory Stick, Memory Stick Pro, SmartMedia, MultiMediaCard, and Secure Digital
CD format support	CD-Audio, CD-EXTRA, CD-ROM, CD-ROM XA, CD-I, Video CD, Photo CD, CD-Text
Transfer rate	
CD-RW Drive	Read: CD-ROM/CD-R: 7800kb/s (up to 52X) CD-RW: 4800 kb/s (up to 32X) Write: CD-R 7800kb/s (up to 52X) CD-RW 4800kb/s (up to 32X)
Card Reader	Read: Up to 1.5MB/s Write: Up to 1.5MB/s
Data buffer	2MB

Access time	90ms at ⅓ stroke(52X CD-ROM) 180ms at full stroke(52X CD-ROM) 99ms at ⅓ stroke (32X CD-RW) 200ms at full stroke (32X CD-RW)
Disc loading	Tray (motorised), Dust Sealed
Audio output level	Line out = 0.6 ± 10%Vrms Headphone out = 0.6± 10%Vrms
Power	5 VDC & 12VDC Card Reader power directly from computer power supply through USB connection
Dimensions	
Height	41.8 ± 0.2 mm
Width	148.8 ± 0.2 mm
Depth	193.4 ± 0.3mm
Weight	1 kg

Disc Specification

Capacity

120mm disc:	74min	650MBytes	Mode-1
	80min	700MBytes	Mode-1
	90min	800MBytes	Mode-1
80mm disc:	18min	158Mbytes	Mode-1
	21min	184MBytes	Mode-1

Environment

CD-RW Drive

Temperature

Operating	5°C to 45°C
Non-operating	-20°C to 60°C

Humidity

Operating	8% ~ 80%RH
Non-operating	5% ~ 95%RH

Card Reader

Temperature

Operating	0°C to 40°C
Non-operating	-20°C to 45°C

Humidity

Operating	0% ~ 90%RH
Non-operating	0% ~ 95%RH

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